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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,506	08/05/2003	Joachim E. Klee	KON-65-CON-2	6904

7590 01/13/2005

DALE R. LOVERCHECK,  
DENTSPLY INTERNATIONAL INC.  
570 West College Avenue  
York, PA 17405-0872

EXAMINER

GITOMER, RALPH J

ART UNIT	PAPER NUMBER
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1651

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/634,506

Applicant(s)

KLEE ET AL.

Examiner

Ralph Gitomer

Art Unit

1651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-30 is/are rejected. 17, 19-30
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Applicant's election without traverse of Group I, claims 17-30, in the reply filed on 12/6/04 is acknowledged. Please update the continuing information in the specification. Applicants may wish to review the specification for typos and proper use of terms.

A search reveals the compound of present claim 18 in the claimed composition to be novel and not obvious. It would appear the point of novelty may reside in the protected nature of the ascorbic acid derivative. Claim 18 is objected to as being dependent upon a rejected base claim 17, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 17, 19-30 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a single compound as claimed in present claim 18, does not reasonably provide enablement for the plethora of compounds claimed. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

The protected reducing agent lacks enablement as it would require one of ordinary skill in this art undue experimentation to determine which such compound would work in the instant invention. The specification as originally filed has an example on page 11 that provides written description for a single compound only.

The entire scope of the claims has not been enabled because:

1. Quantity of experimentation necessary would be undue because of the large proportion of inoperative compounds claimed.
2. Amount of direction or guidance presented is insufficient to predict which substances encompassed by the claims would work.
3. Presence of working examples are only for a single specific substance and extension to other compounds has not been specifically taught or suggested.
4. The nature of the invention is complex and unpredictable.
5. State of the prior art indicates that most related substances are not effective for the claimed functions.
6. Level of predictability of the art is very unpredictable.
7. Breadth of the claims encompasses an innumerable number of compounds.
8. The level of one of ordinary skill in this art is variable.

In re Wands, 858 F.2d 731, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17, 19-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Antonucci.

Antonucci (J Dent Res) entitled "New Initiator Systems for Dental Resins Based on Ascorbic Acid" teaches on page 1889 ascorbic acid and ascorbyl palmitate to stabilize peroxides in dental resins containing other conventional components including as shown in Table 2 on page 1889 various accelerators. Known glasses and other resin components are shown throughout the reference.

Each of the features of the claims are taught by Antonucci for the same function as claimed.

Claims 17-, 19-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over each of Kawaguchi, Subelka, and Klee.

Kawaguchi (4,918,136) entitled "Adhesive Composition" teaches in column 6 ascorbic acid derivatives in dental compositions.

Subelka (WO 98/43596) entitled "Dental Composite Restorative Material and Method of Restoring a Tooth" teaches on page 15 last paragraph, ascorbic acid derivatives for photocurable dental compounds. Regarding the publication date of this patent, October 8, 1998, the earliest priority date is a US application filed October 7, 1997 which is still pending.

Klee (5,688,883) entitled "Polymerizable Composition" teaches in column 3 line 31, column 9 line 55, column 11 line 38, ascorbic acid derivatives in dental compositions.

The claims differ from each of the above cited references in that the claims may include additional species of ascorbic acid derivatives.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ any of the claimed species of ascorbic acid derivatives in the claimed method because each of the cited references teach either a broad genus of derivatives that encompasses those claimed or includes many of those species claimed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17, 19-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 line 4 recites the specified reducing agent is protected and later recites is may optionally have  $\text{Si}(\text{R5})_3$ . It is unclear as to what may be intended by "protected".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ralph Gitomer whose telephone number is (571) 272-0916. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on (571) 272-0926. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ralph Gitomer  
Primary Examiner  
Art Unit 1651

RALPH GITOMER  
PRIMARY EXAMINER  
GROUP 1200